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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/089,789	06/03/1998	JAY M. SHORT	D1270-3US	3204

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VERENIUM CORPORATION
Intellectual Property Department
P.O. Box 910550
SAN DIEGO, CA 92191-0550

EXAMINER

MCGARRY, SEAN

ART UNIT	PAPER NUMBER
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1635

NOTIFICATION DATE	DELIVERY MODE
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12/30/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/089,789	Applicant(s) SHORT, JAY M.	
	Examiner Sean R. McGarry	Art Unit 1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-79 is/are pending in the application.
- 4a) Of the above claim(s) 44,45,48-50,54,57-64,70,71 and 76 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43, 46, 47, 51, 52, 55, 56, 65-69, 72-75, and 77-79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 44, 45, 48-50, 54, 57-64, 70, 71, and 76 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/09/09.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 43, 46, 47, 51-53, 65-69, 72-75 and 77-79 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 43, line 13 refers to an organism sample in section (c) (ii) where these steps are directed to forming a derived nucleic acid library from a nucleic acid sample where the instantly recited limitation is drawn to an organism sample lending to ambiguity of the claim.

Claims 46, 51, 53, 65, 68, 72, 74, 75, and 77-79 all refer to steps (a) or (c) or some combination of those steps. It is noted that step (a) is subdivided into (i) and (ii) and step (c) is divided into (i), (ii) and (iii). In each claim above a specified step is required in (a) or (c), but it is not clear whether these steps are directed to step (a)(i) or

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(a)(ii), or (c)(i), (ii) or (iii). The context of the claims does not provide one in the art with a clear indication of what step is intended for these claims.

Claim 53 recites "said at least two organism markers" at lines 4-5. There is no antecedent basis for this limitation in the claims.

Claim 55 recites "wherein the at least one organism marker is. . ." on line 2. There is no antecedent basis for this limitation in the claims.

Claim 56 recites "wherein the at least one nucleic acid marker is G=C. . .". There is no antecedent basis for this limitation in the claims.

Those claim indicated as rejected and not specifically treated above are rejected in so far as they depend from the claims addressed above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 43, 46, 47, 51, 52, 55, 56, 65-69, 72-75, and 77-79 are rejected under 35 U.S.C. 102(a) as being anticipated by Stein et al [Journal of Bacteriology Vol. 178(3):591-599, 1996].

This rejection is made in part in view of the rejection under 112 second paragraph above.

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Stein et al have disclosed the characterization of uncultivated prokaryotes where the organism samples were obtained directly from an aquatic environment. Genomic nucleic acid samples were selected and placed into libraries. the organism samples where subject to various selections such as size selection. it is disclosed that some samples were collected for rRNA abundance analysis. Nucleic acids were screened for rDNA. Nucleic acid sample were placed into vectors where digested nucleic acids of 35-45kpb were selected. Vectors were placed into e.coli and this organism sample was selected for plasmid containing cells. RDNA containing samples were selected utilizing primers. Nucleic acid samples were selected based on nucleic acid content including 16S RNA and it is disclosed that the sample contained a specified content of C+C content. See entire Materials and Methods section and also Figure 1 which shows various organism and nucleic acid selection steps and well as Figure 2 which shows selection of nucleic acids. See also Table 1. See also top of right column on page 595 and right column of page 596, for example.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 43, 46, 47, 51, 52, 55, 56, 65-69, 72-75, and 77-79 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,001,574. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant methods embrace the invention of the patent document where the methods are clearly disclosed in both the patent specification and the specification of the instant application. the method steps of the patent includes "normalization" of nucleic acids where this limitation is clearly taught in the instant specification and is clearly embraced within the instant method steps, for example..

Claims 43, 46, 47, 51, 52, 55, 56, 65-69, 72-75, and 77-79 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 5,763,239. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant methods embrace the invention of the patent document where the methods are clearly disclosed in both the patent specification and the specification of the instant application. the method steps of the patent includes "normalization" of nucleic acids where this limitation

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is clearly taught in the instant specification and is clearly embraced within the instant method steps, for example.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean R. McGarry whose telephone number is (571) 272-0761. The examiner can normally be reached on M-Th (6:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tracy Vivlemore can be reached on (571) 272-2914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sean R McGarry
Primary Examiner
Art Unit 1635

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